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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,386	12/23/2003	Masahiko Matsukawa	21581-00313-US	7939

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EXAMINER
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ZHENG, LOIS L

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/743,386

Applicant(s)

MATSUKAWA ET AL.

Examiner

Lois Zheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6,7 and 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/3/04, 3/23/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 3-6 are amended in view of the preliminary amendment filed 23 December 2003. New claims 6-20 are added in view of the preliminary amendment. Therefore, claims 1-20 are currently under examination.

### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1-5, 8-14 and 19-20, drawn to a composition, classified in class 148, subclass 243.
  - II. Claims 6-7 and 15-18, drawn to a product, classified in class 428, subclass 432.
3. Inventions II and I are related as product and composition used to make the product. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the composition as claimed can be used to form materially different product or (2) the product as claimed can be formed by using a materially different composition. In the instant case the coating composition as claimed can be used to form a surface treated non-metallic product. The surface-treated metal product as claimed can also be produced by using a materially different coating composition such as a phosphate containing coating composition.
4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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5. During a telephone conversation with Burton A Amernick on 7 June 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-5, 8-14 and 19-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-7 and 15-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hauser et al. US 6,312,812 B1(Hauser).

Hauser teaches a metal surface coating solution comprising zirconium, titanium, fluorine(col. 5 lines 4-15) and a water soluble resin such as primary alkanolamine(col. 10 lines 28-39).

Regarding claim 1, the primary alkanolamine as taught by Hauser meets the structure limitation of the claimed water-soluble resin.

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8. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Carey et al. US 6,607,610 B1(Carey).

Carey teaches metal surface treatment composition comprising zirconium, fluorine and a water soluble resin such as polyphenolamine(abstract, col. 2 line 43 – col. 3 line 65).

Regarding claim 1, the polyphenolamine as taught by Carey meets the structure limitations of the instantly claimed water-soluble resin.

Regarding claim 2, Carey further teaches that the polyphenolamine may contain allylamine groups(i.e. polyallylamine)(col. 2 line 59).

9. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartwig et al. International Application WO 02/090619 A2.

Since WO 02/090619 A2 is in German, the examiner relies on corresponding US. Patent Application Publication 2004/0168748 A1(Hartwig) for establishing the rejection ground.

Hartwig teaches a metal surface treatment coating composition comprising zirconium, titanium, fluorine and an organic base such as polyvinylamine(page 2 paragraph [0024]).

Therefore, Hartwig's coating composition anticipates the coating composition as recited in instant claims 1-2.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3-5, 10, 13-14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser.

The teachings of Hauser are discussed in paragraph 7 above.

Regarding claim 3, the amine containing compound as taught by Hauser has a molecular weight of up to about 10,000(col. 11 lines 4-7) and is present in the coating solution in the amount of 0.005-30%(col. 5 lines 59-62), which overlap the claimed molecular weight of 500-500,000 and the claimed concentration of 5-5,000ppm.

Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed water-soluble resin molecular weight and concentration ranges from the disclosed alkanol amine containing compound molecular weight and concentration ranges of Hauser would have been obvious to one skilled in the art since Hauser teaches the same utilities in its' disclosed alkanol amine containing compound molecular weight and concentration ranges.

Regarding claim 4, Hauser further teaches the addition of citric acid for adjusting the pH of the coating solution. Even though Hauser does not explicitly teach the claimed citric acid concentration, one of ordinary skill in the art would have found it obvious to have routinely optimize the concentration of the citric acid in order to maintain the pH value of the coating solution within the desired range.

Regarding claim 5, Hauser further teaches that the zirconium containing material has a concentration of upto about 10,000ppm(col. 5 lines 21-23) and the pH of the

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coating solution is about 2.0 to about 7.0(col. 5 lines 25-26), which overlap the claimed zirconium concentration of 20-10,000ppm and the claimed pH of 1.5-6.5. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed zirconium concentration and coating solution pH ranges from the disclosed ranges of Hauser would have been obvious to one skilled in the art since Hauser teaches the same utilities in its' disclosed zirconium concentration and coating solution pH ranges.

Regarding claim 10, the instant claim is rejected for the same reasons as stated in the rejection of instant claim 4 above.

Regarding claims 13-14 and 20, the instant claims are rejected for the same reasons as stated in the rejection of instant claim 5 above.

12. Claims 3 -5, 8-14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey.

The teachings of Carey are discussed in paragraph 8 above.

Regarding claims 3 and 8, Carey further teaches that the water-soluble resin is present in the amount of 300ppm(col. 6 line 51). In addition, based on the description of the water-soluble polyphenolamine as taught by Carey(col. 3 lines 19-65), the polyphenolamine of Carey appears to have a molecular weight that overlaps the claimed molecular weight of 500 to 500,000. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed water-soluble resin molecular weight range from the disclosed range of Carey would have been obvious to one skilled in the art since Carey teaches the same utilities in its' disclosed water-soluble resin molecular weight range.

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Regarding claims 4 and 9-11, Carey further teaches the addition of polyamines as a adhesion promoting and corrosion inhibiting agent into the coating composition(col. 5 lines 20-37). Since the claimed accelerator can be a nitro group-containing compound, and the polyamine as taught by Carey is a nitro group-containing compound, the examiner concludes that the polyamine as taught by Carey reads on the claimed accelerator.

Regarding claims 5, 12-14 and 19-20, Carey discloses that the zirconium-containing compound is in the amount of 40ppm(col. 6 line 53), which reads on the claimed zirconium concentration of 20-10,000ppm. The pH of Carey's coating solution is acidic(col. 4 line 37), which overlaps the claimed coating solution pH of 1.5-6.5. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed pH range from the disclosed range of Carey would have been obvious to one skilled in the art since Carey teaches the same utilities in its' disclosed pH range.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).



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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-2, 5 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3 and 6 of copending Application No. 10/743,390 as seen in US Patent Application Publication 2004/0144451 A1(US'451). Although the conflicting claims are not identical, they are not patentably distinct from each other because US'451 teaches a coating composition that is substantially the same as the claimed coating composition(i.e. zirconium, titanium, fluorine and water-soluble resin).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LLZ

  
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